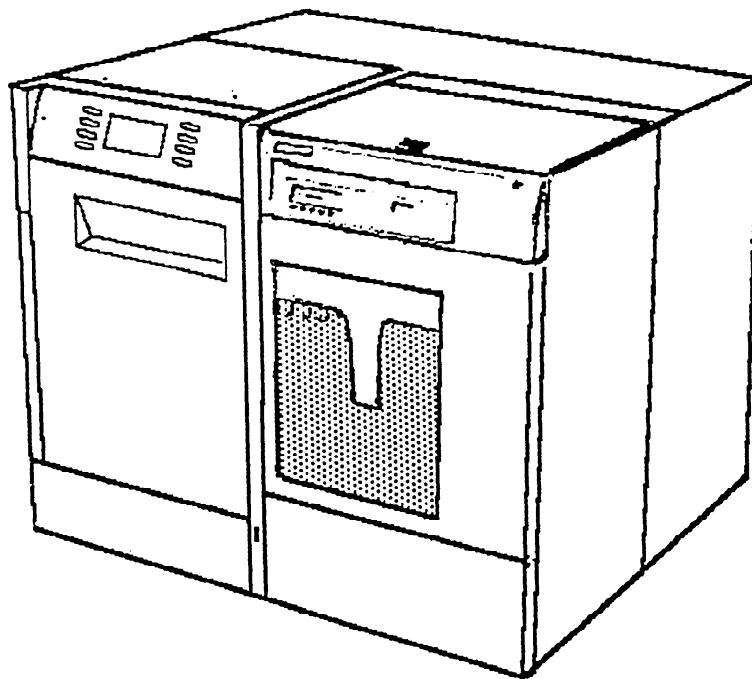




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SERVICE MANUAL
for the
Kodak MULTILOADER 700 SIDE-BY-SIDE KIT



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ADJUSTMENTS

SENSOR B1

This SENSOR monitors the FILM as it leaves the ML700 and enters the SBS-CARRIAGE. The SENSOR is the same type as the FILM PRESENT DETECTORS of the ML700. Its infrared beam is reflected by a REFLECTIVE STICKER. As soon as the infrared beam is interrupted by the FILM the state of the sensor output will change. SENSOR B1 detects the LEADING EDGE and some time later the TRAILING EDGE of the FILM.

ADJUSTMENT

Purpose:

To ensure that the FILM is correctly detected by the SENSOR.

NOTE

Do not set the gain to high. In this case the film may not be detected by the SENSOR.

1. With no FILM in-between the SENSOR and the REFLECTIVE STICKER turn the SENSOR GAIN ADJUSTMENT SCREW ccw until the INDICATOR LED turns red.
2. Turn the SENSOR GAIN ADJUSTMENT SCREW until the INDICATOR LED turn green.
3. Turn 1 step further. Not more.

SENSOR B3/4

These SENSORS monitor the left and right end positions of the SBS CARRIAGE.

ADJUSTMENT

Purpose:

To ensure that the FILM is centred in the SBS CARRIAGE and that the FILM passes correctly through the PROCESSOR ADAPTER and through the SLOT of the PROCESSOR UNIVERSAL FILM DETECTOR BOARD.

1. Override the SBS-INTERLOCK with 2 PERMANENT MAGNETS (PN 544240). Place them above the REED CONTACTS on either side of the SBS
2. Load TEST FILMS into to ML700 to avoid fogging of CUSTOMER FILMS.
3. Run a few cycles with different CASSETTE SIZES and observe the film transport through the SBS.

4. Check that large films are transported centred into the SBS-CARRIAGE from the ML700. If the FILM is not centred, continue with step 5, else continue with step 6.
5. Turn the SENSOR POSITION SCREW of SENSOR B3/4 (adjust the SENSOR on the ML700 side of the SBS) in or out as required and go back to step 3.
SENSOR B3 detects the left-hand position of the CARRIAGE
SENSOR B4 detects the right-hand position of the CARRIAGE.
If necessary move the SENSOR MOUNT up or down, so that the CARRIAGE FLAG is midway in between. This midway position is not critical.

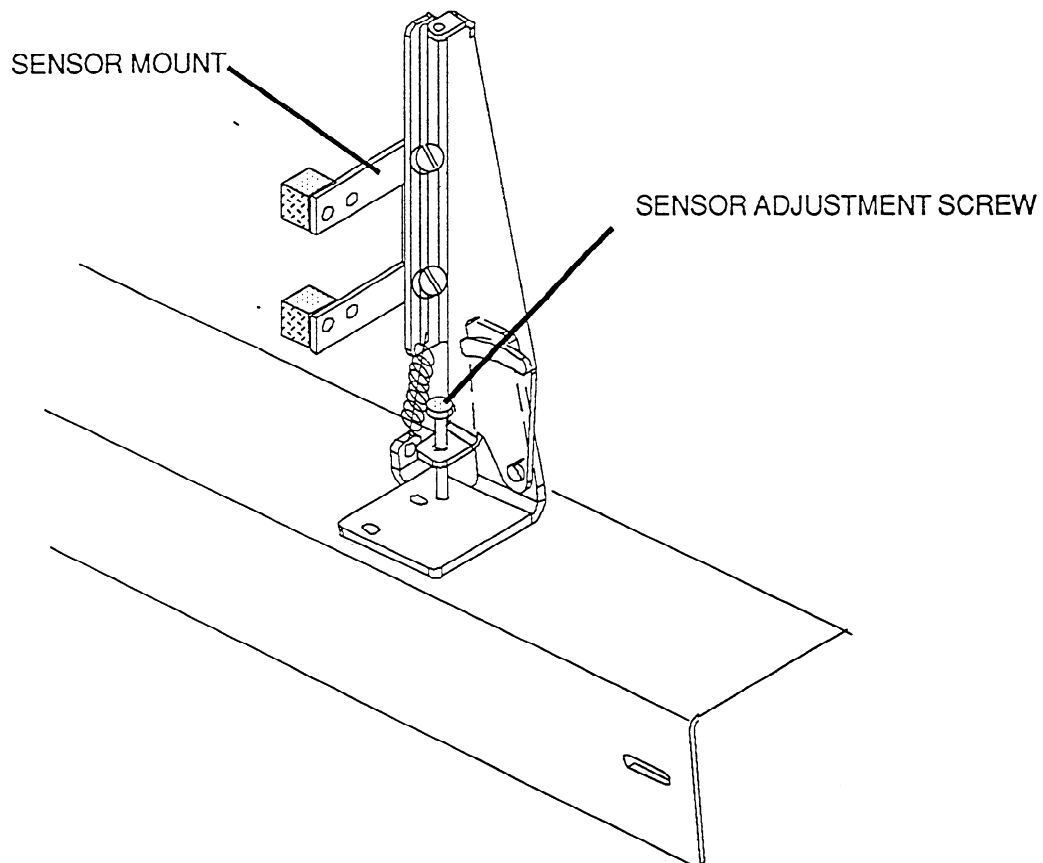


figure 1-1

6. Ensure that a large FILM (35x43) passes through the ADAPTER and that it is fed correctly into the PROCESSOR. If the FILM touches the right or left side of the PROCESSOR FEED SLOT, continue with step 7 else with step 9.
7. Turn the SENSOR POSITION SCREW of SENSOR B3/4 (adjust the SENSOR on the PROCESSOR side of the SBS) in or out as required. See the drawing on the previous page.
8. Start the next cycle and go back to step 6.

9. Ensure that the FILM passes correctly through the SLOT of the PROCESSOR UNIVERSAL FILM DETECTOR BOARD. If necessary adjust the position of this board.

MOTOR M2

This MOTOR drives the FILM in and out of the SBS CARRIAGE.

ADJUSTMENT

Purpose:

This adjustment ensures that the current through MOTOR M2 is set to 0.4 A.

1. Connect the DVM to TP2 and TP13 of the SBS PCB A4. See the drawings on this and on the next page.
2. Adjust R80 for $2.9 \pm 0.3 - 0.15$ V.

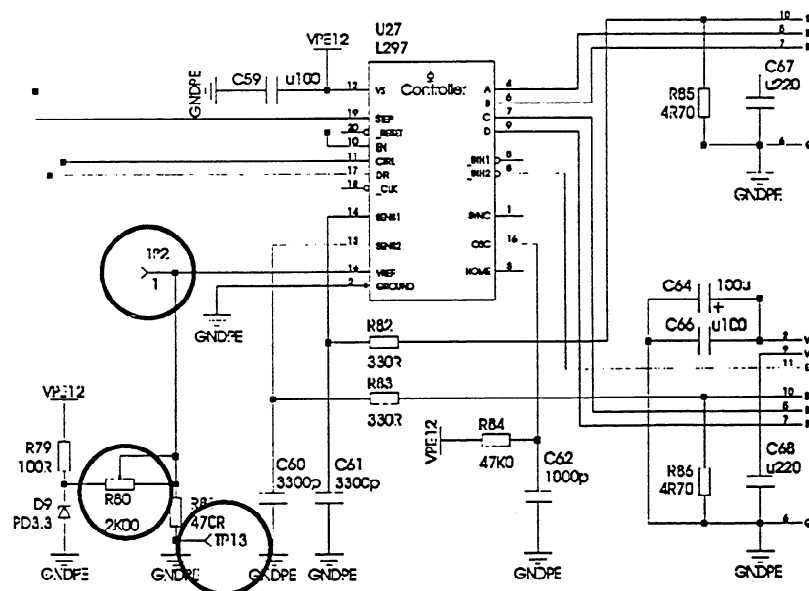


figure 1-2

LAYOUT PCB A4

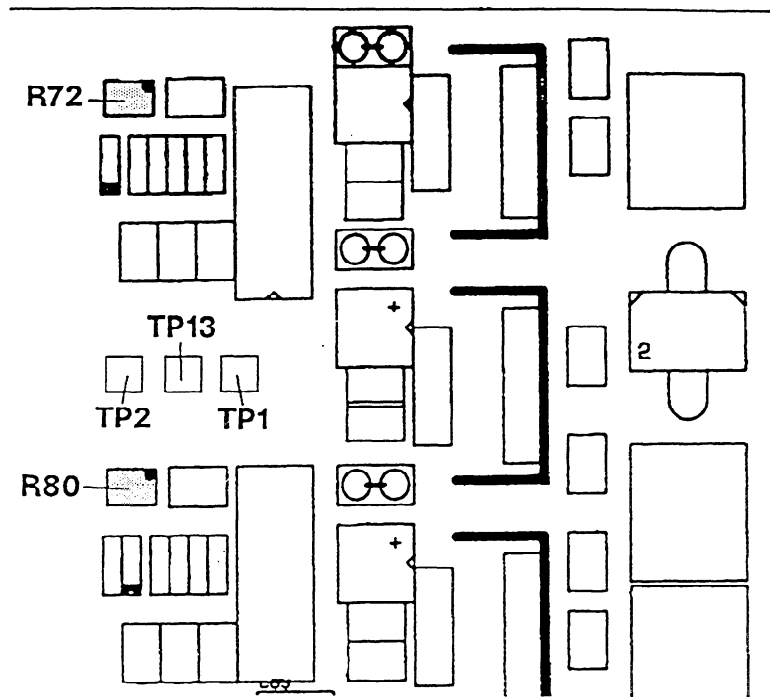


figure 1-3

MOTOR M3

This Motor drives the FILM through the PROCESSOR ADAPTER.

ADJUSTMENT

Purpose:

This adjustment ensures that the current through MOTOR M3 is set to 0.24 A.

1. Connect the DVM to TP1 and TP13 of the SBS PCB A4. See the layout above and the circuit diagram on the next page.
2. Adjust R72 to $1.45 \text{ V} \pm 0.15 \text{ V}$

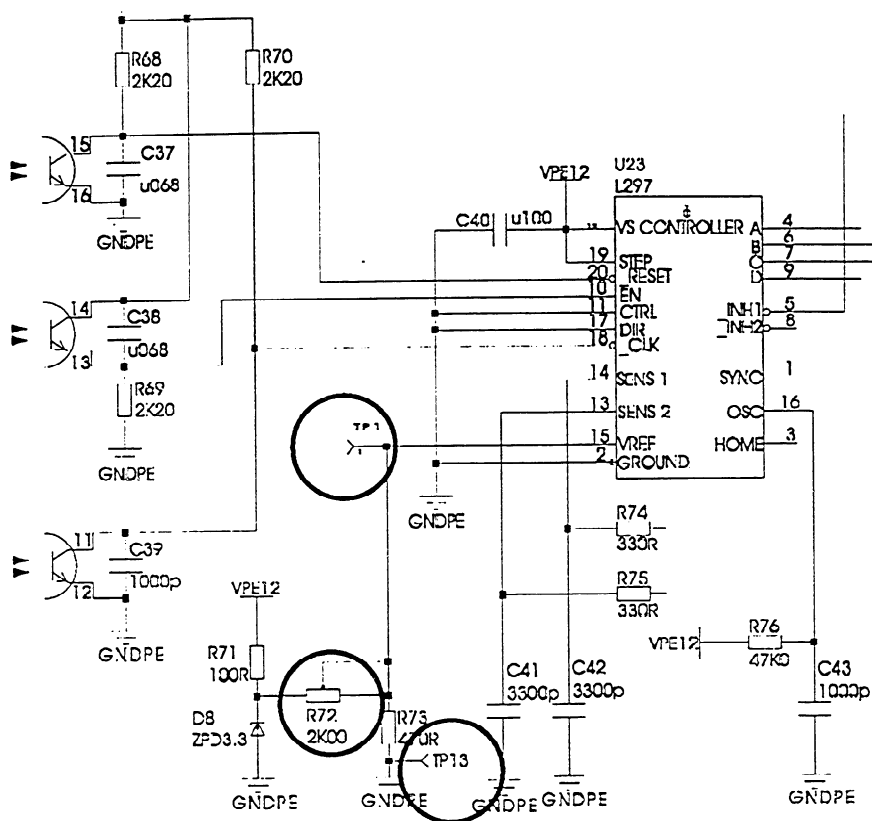


figure 1-4

CARRIER ROLLERS

PURPOSE:

To take out excessive play between the ECCENTRIC CARRIER ROLLERS and the GUIDE.

1. Take out the CARRIAGE DRIVE ASSEMBLY. See the procedure in the REPLACEMENT SECTION.
2. Loosen the MOUNTING SCREW of the ECCENTRIC ROLLER. See the drawing on the next page.
3. Turn the CORE of the ROLLER until there is no play between ROLLER and GUIDE.

NOTE

There are small slots in the ROLLER CORE. Insert a JEWELLERY SCREW DRIVER into one of them and turn the CORE as required.

4. Fasten the ROLLER MOUNTING SCREW.
5. Install the CARRIAGE DRIVE ASSEMBLY.

ADJUSTMENTS

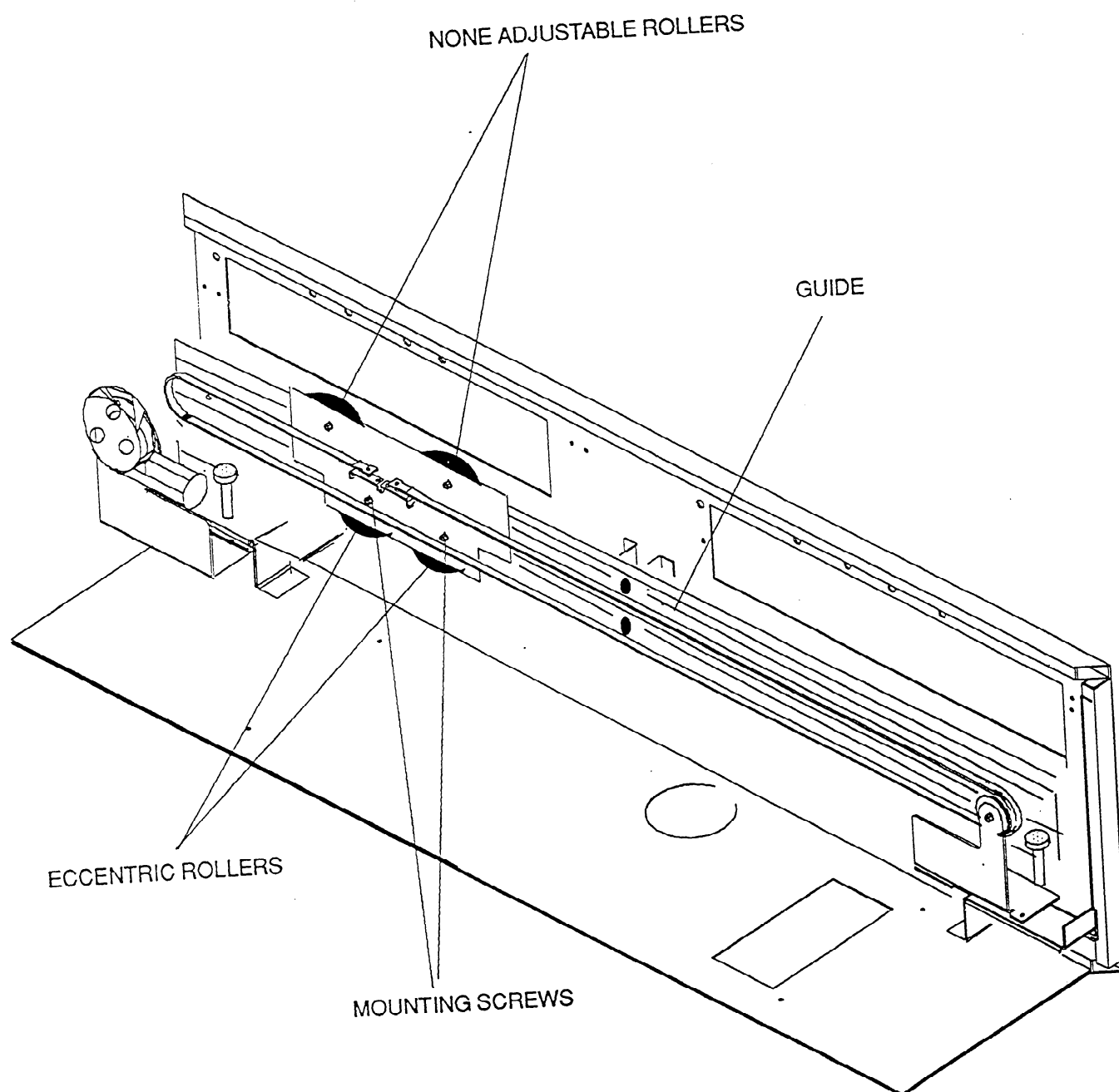


figure 1-5

SERVICE PLATE

In case of a ML700 repair, the ML700 is disconnected from the SBS. The SBS is now no longer lighttight and the CUSTOMER could not process FILMS via the DFT in the DARK ROOM. To avoid this situation a so-called SERVICE PLATE is part of the SBS INSTALLATION KIT.

1. Disconnect the ML700 from the SBS. Turn the SBS-LOCKING SHAFT until the ML700 is disengaged. Use the HANDLE delivered with the INSTALLATION KIT.

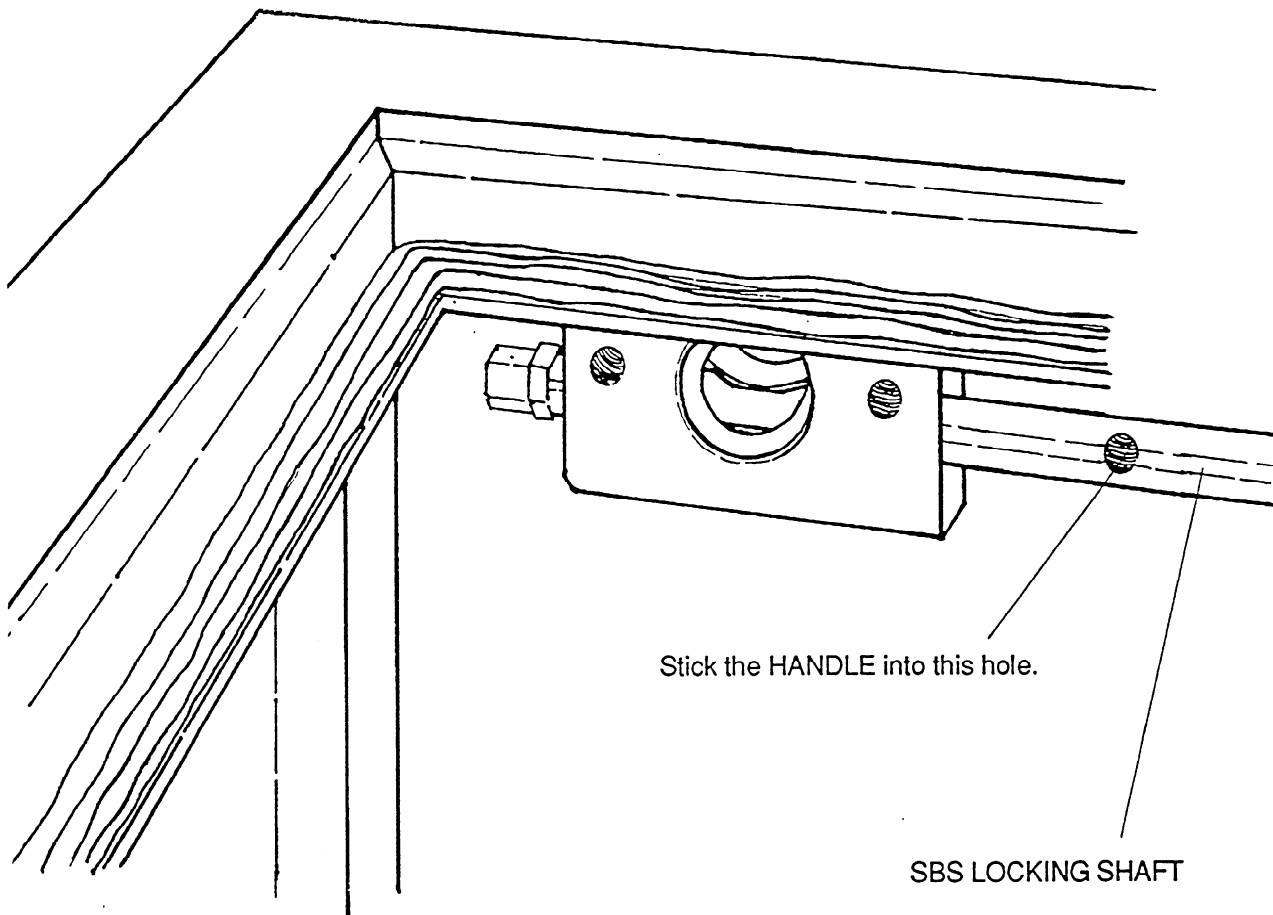


figure 1-6

2. Move the ML700 from the SBS.

3. Mount the SERVICE PLATE to the SBS.

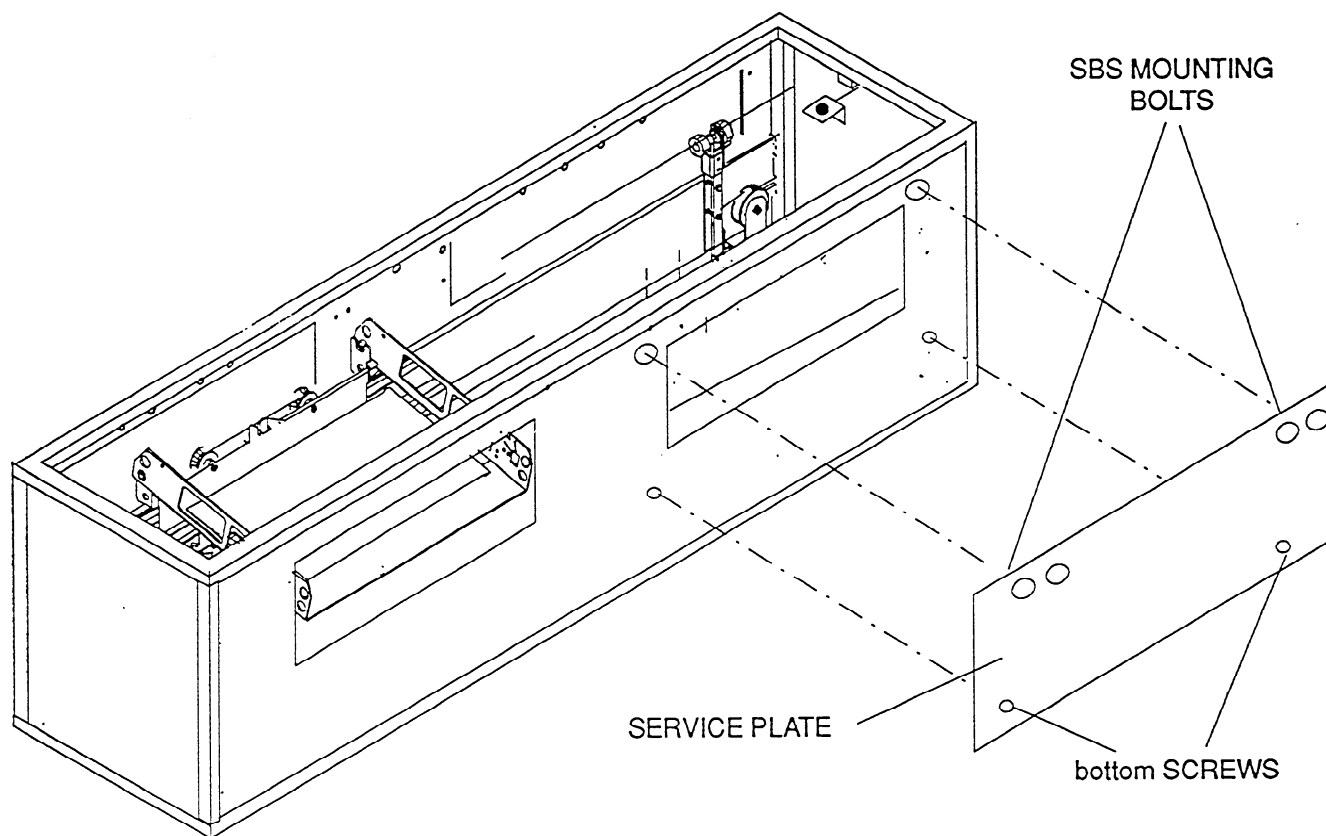


figure 1-7

4. Turn the SBS-LOCKING SHAFT until the SERVICE PLATE is locked.
5. Fix the 2 bottom SCREWS with NUTS.

NOTE

The SERVICE PLATE in the INSTALLATION KIT is already configured for ML700 left or ML700 right as requested. If the SBS orientation is to be reversed in the field, the position of the 2 SBS MOUNTING BOLTS has to be adapted to the new orientation. The mounting holes for the other orientation are already in the SERVICE PLATE but closed with a piece of tape.

REPLACEMENTS

CARRIAGE DRIVE ASSEMBLY

PURPOSE:

To get better access to the components the CARRIAGE DRIVE ASSEMBLY should be taken out completely if

a TIMING BELT has to be replaced

or

the play between CARRIER ROLLERS and the GUIDE has to be adjusted.

DISASSEMBLY

1. Switch off the SBS SYSTEM.
2. Take off the SBS-COVER and take out the CARRIAGE.
3. Disconnect A4X27 and A4X16.

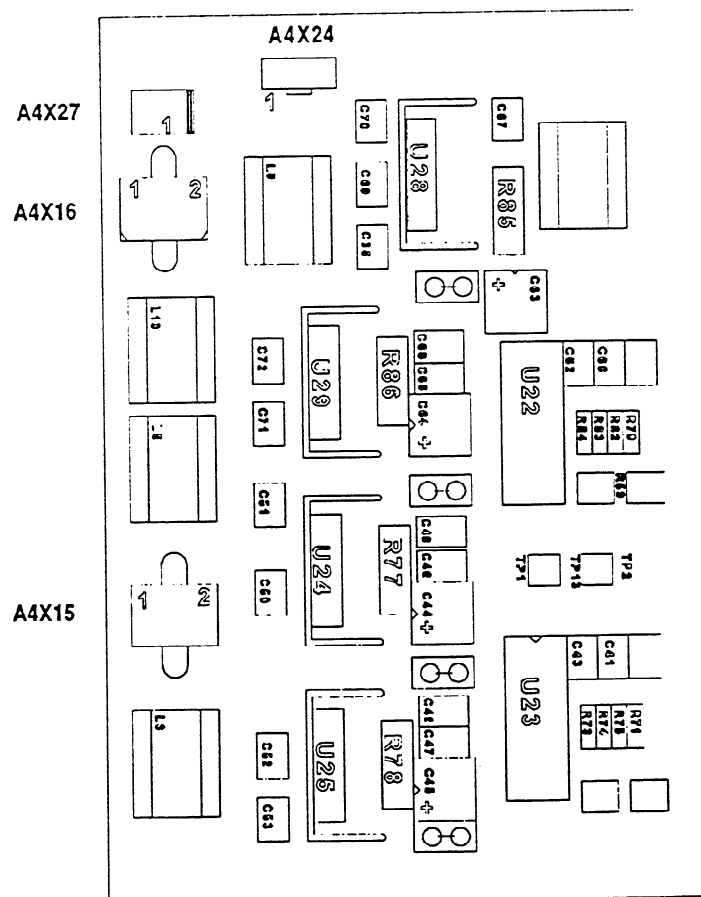


figure 2-1

4. Take out the outermost SCREWS (left-hand side 2 screws and right-hand side 2 screws) and the 2 centre SCREWS. Use the ALLEN KEY TL 4942.

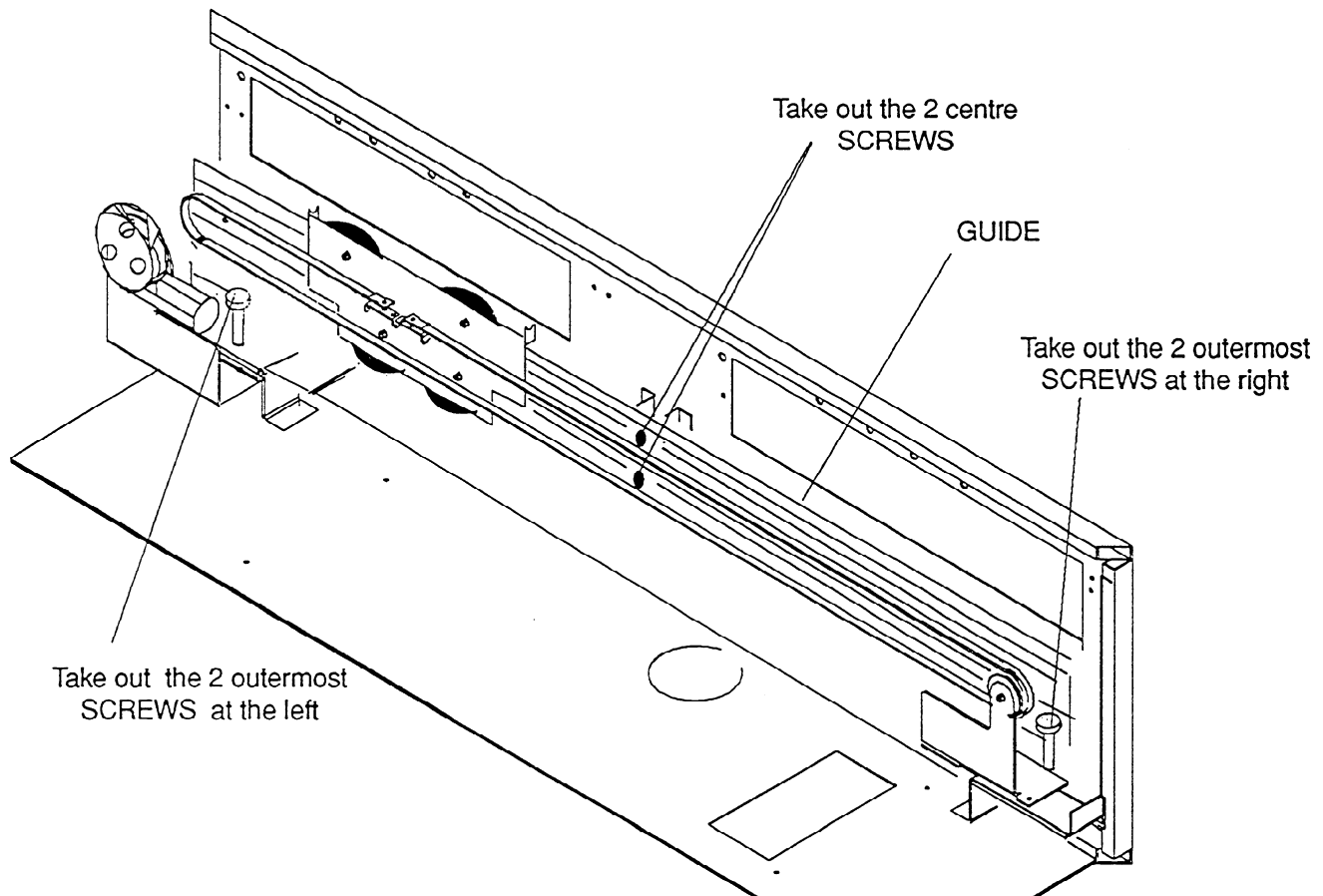


figure 2-2

5. Carefully lift out the complete CARRIAGE DRIVE ASSEMBLY and place it on a flat surface.

ASSEMBLY

1. Carefully place the CARRIAGE DRIVE ASSEMBLY into the SBS.
2. Screw in the 2 centre SCREWS. They give the correct position for the assembly.
3. Screw in the SCREWS left and right (total of 4 SCREWS).
4. CONNECT A4X27 and A4X16.

5. Override the COVER INTERLOCK with 2 PERMANENT MAGNETS (PN 544240). Place them above the REED CONTACTS on either side of the SBS.
6. Insert the CARRIAGE.
7. Switch on the SBS SYSTEM.
8. Check that the CARRIAGE stops correctly at the PROCESSOR and ML700 side. If necessary do the adjustment of SENSORS B3/4.
9. Take the PERMANENT MAGNETS of the REED CONTACTS and close the SBS.

TIMING BELT

1. Take out the CARRIAGE DRIVE ASSEMBLY.
2. Turn the SCREW at the left-hand side of the TIMING BELT TENSIONER fully in. This takes the tension of the BELT. See the drawing on the next page.
3. Take the TIMING BELT of the TENSIONER and discard the BELT.
4. Route the new TIMING BELT around the GEARS and screw the BELT to the TENSIONER.
5. Loosen the SCREW at the left-hand side of the TENSIONER to tension the BELT.

NOTE

Do not take out this SCREW.

6. Install the CARRIAGE DRIVE ASSEMBLY.

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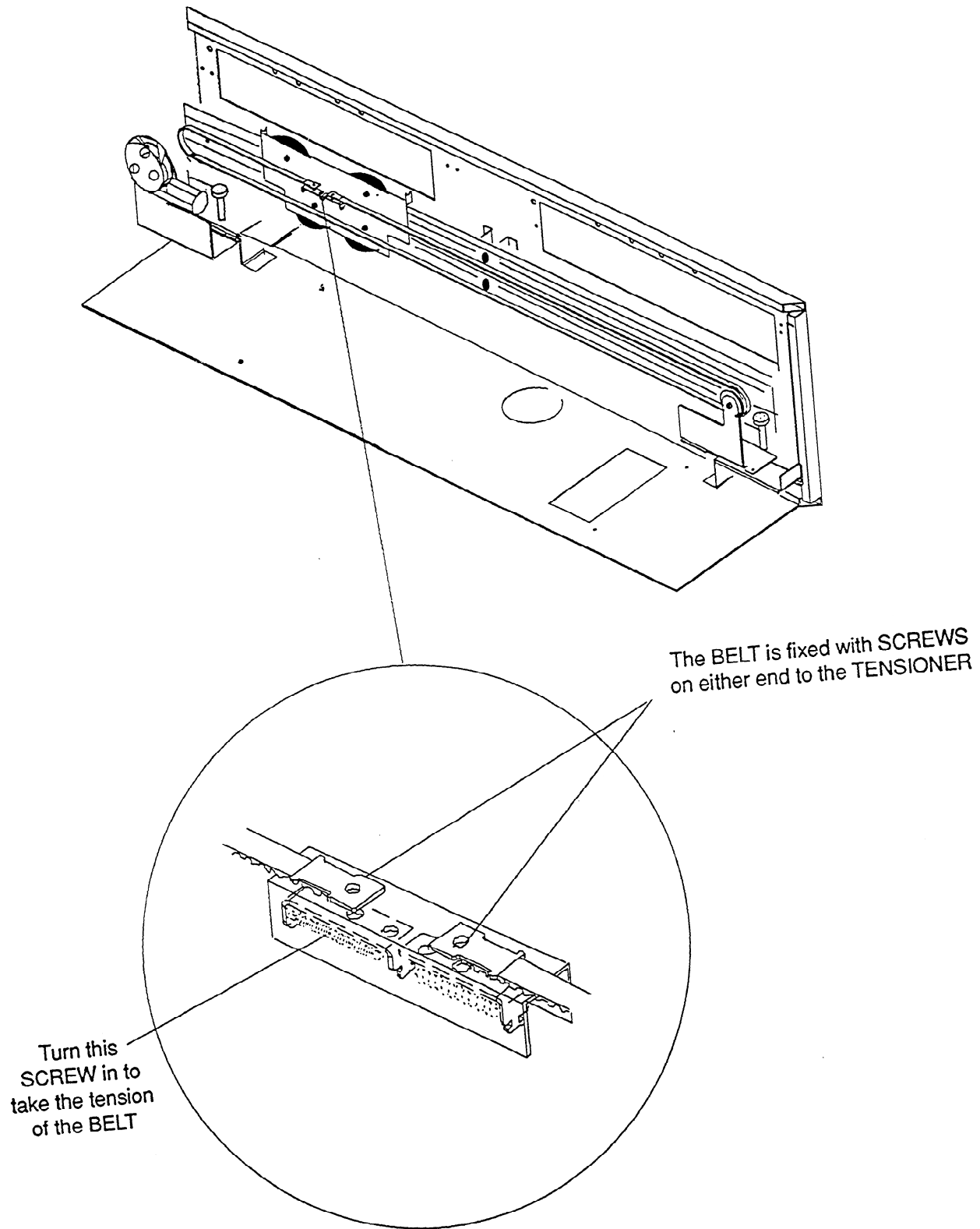


figure 2-3



CUSTOMER EQUIPMENT SERVICES KODAK AG STUTTGART GERMANY